

CLAIMS

1. An ignition coil comprising;  
a housing;  
a rod-shaped center core arranged  
5 substantially at the center within the housing;  
a thermal stress relaxing member covering  
the outer circumferential surface of the center core;  
a cylindrical spool arranged on the outer  
circumferential side of the thermal stress relaxing  
10 member with a gap in between; and  
a resin insulating material with which the  
gap is filled and which hardens; wherein  
the thermal stress relaxing member is  
wound around the center core; and  
15 the thickness of the thermal stress  
relaxing member is set to a thickness so that the thermal  
stress, which is caused by the thermal deformation of the  
center core and is applied to the resin insulating  
material, is reduced and reaches a saturation value  
20 thereof.
2. An ignition coil, as set forth in claim 1,  
wherein the center core is a laminated core made up of  
magnetic plates stacked in the radial direction.
3. An ignition coil, as set forth in claim 1,  
25 wherein the thermal stress relaxing member has a linear  
expansion coefficient of  $25 \times 10^{-6}^{\circ}\text{C}$  or lower and the  
thickness thereof is set to 0.1 mm or greater.
4. An ignition coil, as set forth in claim 1,  
wherein the thermal stress relaxing member is made of  
30 poly ethylene terephthalate, polyester, glass fabrics,  
polyamide, fluororesin or vinyl chloride and the  
thickness of the thermal stress relaxing member is set to  
0.1 mm or greater.